

**HOLODECKS AND ACTIVE SHOOTERS:
HOW THE FUTURE OF VIOLENT VIDEO GAMES WILL EFFECT
LAW ENFORCEMENT**

By

**Erik Upson
Berkeley Police Department**

March, 2011

COMMAND COLLEGE CLASS 48

The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

The views and conclusions expressed in the Command College Futures Project and journal article are those of the author, and are not necessarily those of the CA Commission on Peace Officer Standards and Training (POST).

HOLODECKS AND ACTIVE SHOOTERS: HOW THE FUTURE OF VIOLENT VIDEO GAMES WILL EFFECT LAW ENFORCEMENT

The Opening Act

Chris' arm hurt. In fact, in this brief moment of respite, his whole body hurt. He could barely lift his arm at this point. He had run out of ammo for his HK G-36 assault rifle on the first floor, much earlier than he had anticipated. This had forced him to go quickly to his two back-up pistols. The stairwell of the school had been full of targets...targets such as several members of the football team and at least one cheerleader, which he could not pass up. So, he had run through all of his ammo before he even made it to the second floor. He had moved quickly to his twin machetes as he moved through the library. The explosives he had placed there early where about the only thing that had gone right with his plan, leaving only 10-15 students and teachers alive, but wounded or in shock.

So, he had hacked his way through the survivors there and now stood in the hallway, partially blinded by smoke, sweat and flying blood splatter, and was exhausted beyond his expectations. Now, he needed to move quickly to where he and Paul had stashed their shotguns. This was to be their link-up; Chris was five seconds behind schedule. Worse yet, according to his research, the first group of four officers in a standard diamond formation should - "*Chris!*". Chris tried to stay focused, beginning to move down the smoke - "*Chris! Damnit, Chris get down here...dinner is on the table!*". Chris swore to himself and ripped off his fully immersive X-Box 5D headset and threw it on the floor. The laser 3-D imaging cameras mounted on the four walls of the room went still and pointed to the floor. The smell of smoke and cries of the wounded disappeared. Chris was still tired, but was mostly upset, as his mother had set back his and Paul's

planned attack on Central High School by at least a week. On the other hand, Paul was on the other side of town and Chris and he had not actually met face-to-face yet...so perhaps they would get a chance to hook-up before the big day...

The Emerging Cyber-Adversary

The future of violent video games will intersect in a very dangerous way with our youth in the next ten years, though not in the ways people traditionally fear. It is the training capacity of future violent video games, and their ability to socially network likeminded people, to which law enforcement needs to pay close attention. This increased training capacity will mean increased familiarization with weapons handling, movement tactics (including the tactics of law enforcement), familiarization with the 'battlefield' or location of the intended attack, and dealing with sensory overload. The increased training capacity also includes an increased desensitization to violence. Video gaming enhances the ability for like-minded youth, intent on violence, to come together, recruit, and to train in cyberspace. Law enforcement needs to understand this, both to better prepare for their potential cyber-trained adversary, and also to prioritize intelligence gathering and operations in cyberspace.

There are four points in the vignette above that are critical for law enforcement to understand:

- Video games will become hyper-realistic in the next ten years, affecting all of the senses. Emory Rowland, founder of the technology reporting website Clickfire, said it best: "How can we know that the Holodeck-style experience is inevitable? Because that's what we want. And technology and capitalism always ensure we always get what we want" (Rowland, 2007)

- While there still may be questions as to the link between violence and violent video games, there will be no doubt of its enhanced training capacity
- Gamers will be able to physically rehearse violent attacks in cyberspace (in an exact recreation of the target site)
- Gamers will link up in cyber social-network based on violent gaming with like minded individuals and will rehearse and coordinate attacks there

Causation, briefly

Research into violent video gaming draws similar conclusions regarding the effects of violent video game usage and youth gun violence: its inability to provide clarity. While the *direct causal link* between violent video games and youth gun violence is not clear, there are several important aspects that emerge from the studies conducted.

The general result of studies of media violence on youth violence, such as *The Influence of Media Violence on Youth* (Anderson et al., 2003), indicate that media violence could be seen as “one part of the complex influences on behavior of children and youth...Media violence exposure is only one risk factor underlying aggression and violence” (pg. 69). In Anderson and Bushman’s 2001 study entitled *Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior*, the authors conducted a meta-analysis looking at 33 studies of the causal relationship between violent video games and aggression (Anderson and Bushman, 2001). This research concluded that “high video-game violence was definitely associated with heightened aggression” (pg. 357). Unfortunately, they could only indicate that this was a short-term effect, and there was no clear understanding of what the long-term effects were, as there was a need for further

study over an extended period of time (longitudinal studies). Another study by Tamoborini et al (2004), indicated there is an increase in hostility in correlation to an increase in realism of the video game (pg 341). If this linkage is accurate, it could be important as we look ten years out at the future of video game technology as video game technology it becomes increasingly hyper-realistic.

The meta-analysis by Anderson and Dill in 2000 indicated three studies showing positive correlations between violence in video games and youth violence, one neutral study, and four studies showing weak evidence. As a result, Anderson and Dill noted that, “With the recent trend toward greater realism and more graphic violence in video games and the rising popularity of these games, consumer of violent video games...should be aware of these potential risks” (pg. 35). Their study also showed that the positive correlation between video game violence and actual violence was stronger “for individuals who are characteristically aggressive “ (pg. 1).

The purpose of discussing these studies is not intended to serve as a comprehensive explanation of the causal effects of violent video games on youth violence; rather, it is to help us refocus on what we know and can affect. Any direct linkage of youth gun violence to violent video games is fractional from all best evidence. As pointed out in an interview with Professor Franklin Zimring, perhaps the preeminent youth violence expert, that if a direct link existed we would have seen a huge spike in gun violence corresponding with the huge increase in violent video game exposure over the last 10 years. This has not materialized. Given the lack of evidence supporting a primary role of violent video games in causation of youth gun violence, though, what can law

enforcement learn from the trends of violent video games and their effect on law enforcement in the future?

Enhanced Training Capacity.

The Columbine High School attack in 1999 holds some significant trend indicators. There initially appeared to be a strong relationship between the violent video games they played and the attack by Eric Harris and Dylan Klebold, and many people wanted to point to the games as the causal link. Evidence has shown, rather, that the violent video games were more likely just a piece of the totality of circumstances which caused them to attack (Block, 2007 and Cullen, 2009). What is clear is their ceaseless playing of Doom, Castle Wolfenstein and other violent games had helped *prepare* them for their attack. In the subsequent investigation, it was learned they had possibly created a level of Doom called “Tier” that was actually a mock-up of Columbine High School (Block, 2007, p. 10). This would have allowed them to rehearse the timing of their attack.

There are many other examples of school and other shootings associated with violent video games. In Jonesboro, Arkansas, attack, one suspect was 13 years old and the other 11, yet they killed 5 with shots to the head and chest and wounded 10 others. They did this while only firing a total of 27 rounds. Considering one of them had never shot a real gun, but had played interactive shooting games, this is a phenomenal hit rate (Dwyer, 1998). In Paducah, Kentucky, a 14 year-old boy who had never fired a handgun in real life, but had played violent first-person shooter video games, entered a school and fired eight times, making five head shots and three center mass torso shots (Grossman & DeGaetana, 1999). Although the specific causality may be in question, evidence strongly

indicates the gaming experiences of these killers assisted in their proficiency during their assaults.

Another trend is the emergence of video games involving police tactics. The highly regarded SWAT series (now on it's fourth iteration) utilized SWAT team members for insight, down to putting motion sensors on them during the game's development to make their movements in the game more realistic. These tactics are, then, readily available for study and planning by those who would expect to face a law enforcement response.

Increased realism will mean better trained opposition to police response to active shooters. We have seen many active shooters (and others), who are quickly overwhelmed and tied down by a single officer (El Cajon High School, California), off-duty officer (Trolley Square Mall, Salt Lake City, Utah), or security guard (New Life Church, Denver, Colorado). This has helped forge the conventional wisdom now circulating in law enforcement to have the first officer (or several officers) on scene immediately attempt intervention rather than waiting for specialists or significant forces to enter the tactical scene. This tactic could have disastrous results against a well-trained attacker. One needs only to look at attempted law enforcement intervention against highly trained suspects, such as seen in Ceres, California on January 9, 2005 when one sergeant was killed and another officer injured by a 19 year-old Marine. The video surveillance of this incident shows the young aggressor attacking officers rather than taking cover or retreating, using superior firepower to keep them pinned down and unable to return fire. The suspect can also be seen 'slicing the pie' as he aggresses, an advanced tactic taught in the military and law enforcement (and first-person shooter video games).

More and more games, such as the *Medal of Honor* series and *World of Warcraft*, are played by multiple players connecting remotely in cyberspace. Sometimes, these are friends coming together to play remotely, but often it is a group of relative strangers drawn together by the game. The most recent iteration of the *Medal of Honor* series even allows players to play as the Taliban, rather than western forces. This is an example of a location where like-minded individuals could come together, meet, and train and rehearse for a violent attack without ever meeting in person. As game technology improves, and this trend continues, we will undoubtedly see more custom-crafted locations. These locations could include cityscapes, and even individual malls and schools.

The Solutions

As we move into this future of fully-immersive gaming, what steps can be taken to mitigate the desensitization, enhanced killing capacity, and ability for like-minded violent youth to come together, plan, and coordinate their attacks in cyberspace?

The first lesson actually comes from SWAT IV, the same video game mentioned above. From the Amazon.com product description: “Looking for a tactical shooter that asks you to do more than charge a building, guns a’ blazin’? With a focus on *sparing* as many lives as possible, SWAT 4 not only raises the stakes, it raises the realism to a new level. Choose your loadout carefully and only go lethal when all else fails and the lives of innocents or a squad member are at stake.” (Amazon.com, 2011). It may also be seen the Army’s new “America’s Army”. In this popular game, which is full of violence, the Army imbeds the “Army Values”. This subtle adjustment, likely not noticed by most players, presents a piece of the solution. Court challenges over the years have shown that Constitutional questions will preclude voters or legislatures mandating content controls

on violent video games. The gaming industry could, though, decide on a common set of values which they will not transgress, and self-regulate those boundaries through the existing Entertainment Software Rating Board (ESRB).

This will make the second solution easier to implement. The second solution, which will benefit all departmental investigations, is to insure there is a consistent and talented presence in cyberspace in every police department. This is where future violent youth will come together and train. Already, we have seen violent attacks telegraphed on spaces such as MySpace and Facebook. In a recent school shooting in Omaha, the student wrote these last words on Facebook: “Everybody that used to know me I'm sry but Omaha changed me and (expletive) me up. and the school I attend is even worse ur gonna here about the evil (expletive) I did but that (expletive) school drove me to this. I wont u guys to remember me for who I was b4 this ik. I greatly affected the lives of the families ruined but I'm sorry. Goodbye” (Kannalley, 2011). This intelligence gathering might look similar to the on-line intelligence gathering anti-child sexual abuse teams currently utilize.

Finally, law enforcement needs to ensure it stays connected with those who would be most likely to see the warning signs emerging. This would include school staff, youth program staff, gang officers, youth services officers, and parents. In these days of cuts, cutting school positions is short-sighted. Every successful intervention, even if only partial, pays dividends that never stop paying.

- Amazon.com. (n.d.). Product Description SWAT IV. Retrieved December 15, 2010, from <http://www.amazon.com>
- American Psychological Association. (2000, April). *Violent video games can increase aggression*. Washington D.C.: Author.
- Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L., Johnson, J., Linz, D., Malamuth, N., Wartella, E. (2003). The influence of media violence on youth. *Psychological Science in the Public Interest*, December 2003, 83-110.
- Anderson, C. A., Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science*, 12 (5), 353-359.
- Anderson, C. A., Gentile, D. A., & Buckley, K. E. (2007). *Violent video game effects on children and adolescents*. New York: Oxford University Press.
- Block, J.J. (2007). Lessons from Columbine: Virtual and Real Rage. *American Journal of Forensic Psychiatry*, 28(2)
- Columbine High School massacre*. (n.d.). Retrieved March 19, 2010, from http://en.wikipedia.org/wiki/Columbine_High_School_massacre
- Cullen, D. (2009). *Columbine*. New York: Hachette Book Group.
- Dwyer, J. (1998). Kids trained to kill 'people' who don't die [Electronic version]. *New York Daily News*.
- Grossman, D., & DeGaetano, G. (1999). *Stop teaching our kids to kill*. New York: Crown Publishers.

- Kanalley, C. (2011). Millard South High School Shooting Student Shoots Principal, Vice-Principal in Omaha [Electronic version]. Huffington Post, 1. Retrieved February 12, 2011, from http://2011/01/05/millard-south-high-school-shooting_n_804875.html
- Rowland, E. (2007). Gaming in the Future. *Clickfire*. Retrieved March 20, 2011, from <http://www.clickfire.com/gaming-in-the-future/>
- Tamborini, R., Eastin, M. S., Skalski, P., Lachlan, K., Fediuk, T. A., & Brady, R. (2004). Violent virtual video games and hostile thoughts. *Journal of Broadcasting & Electronic Media*, September 2004, 335-357.